

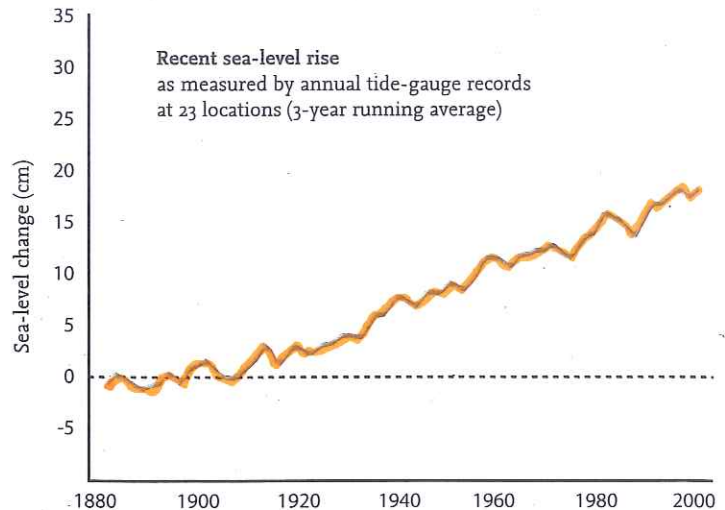
## Effects of Global Warming (Part 2)

### 6.1.3 Discuss qualitatively the potential effects of increased mean global temperature

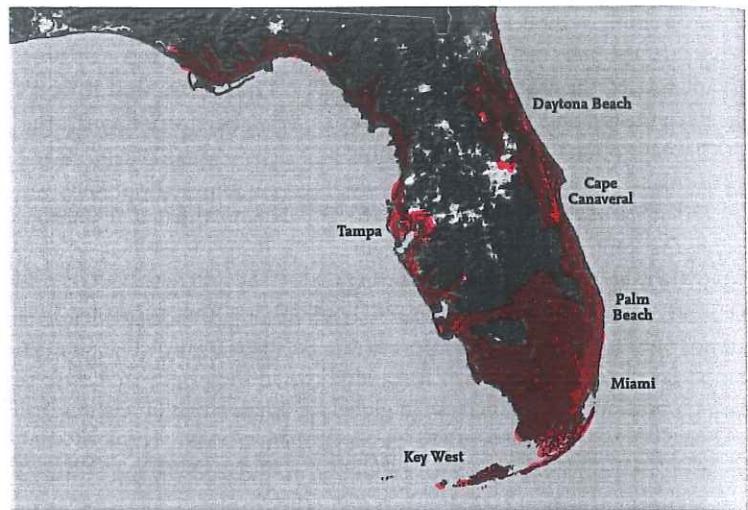
#### Coastal Inundation

↳ Caused by:

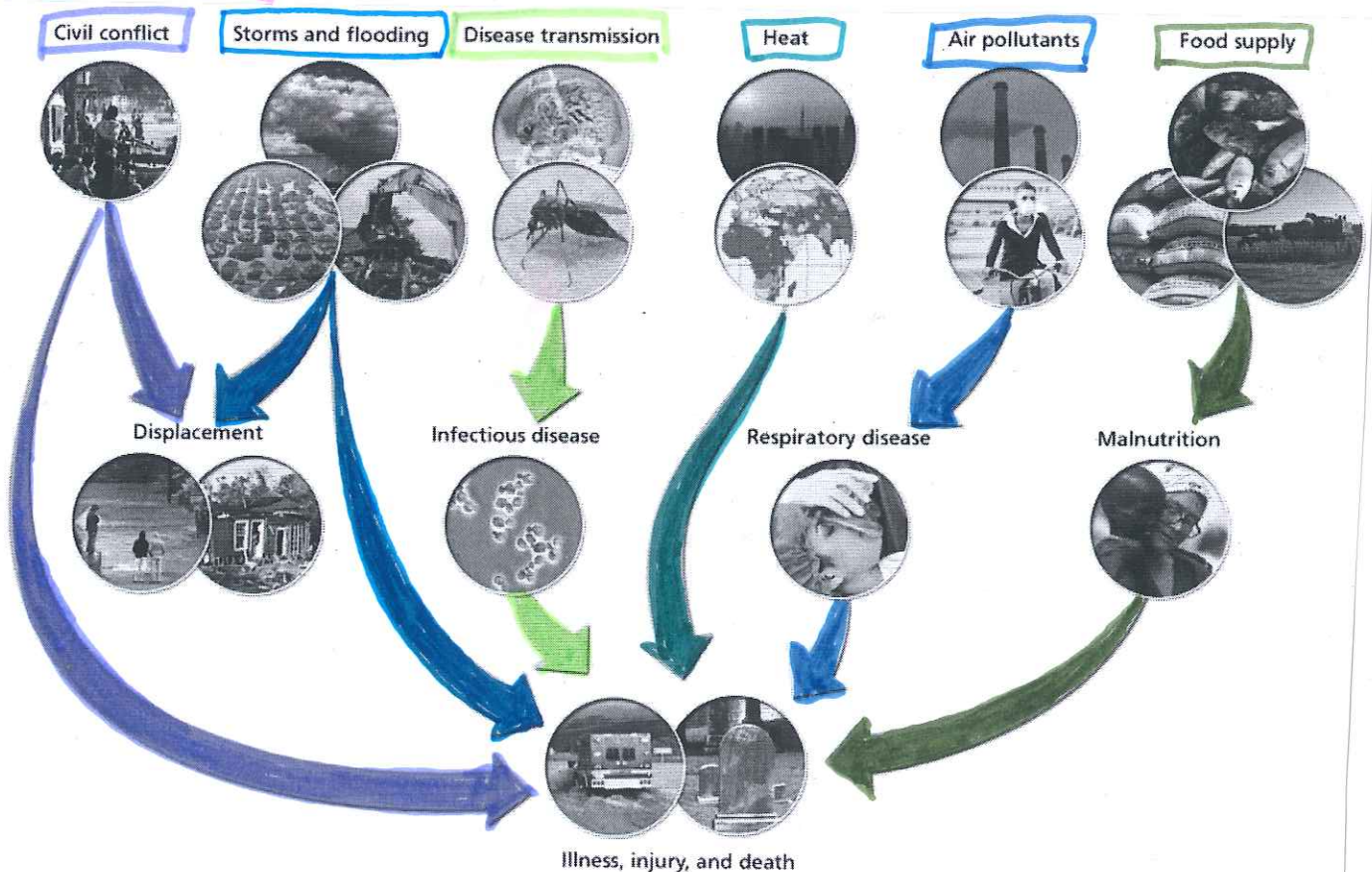
- Glacier / Landice melting (esp. Greenland & Antarctica)
- Warmer water expands



Model of FLORIDA (USA) After coastal inundation  
(lighter colored areas areas of higher pop) →



#### Human Health



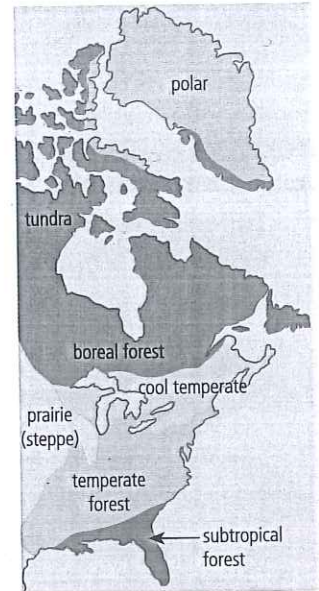
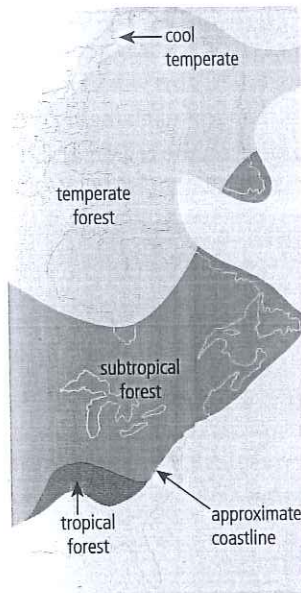


## Biomes Shifting

50-60 million years ago

18 000 years ago

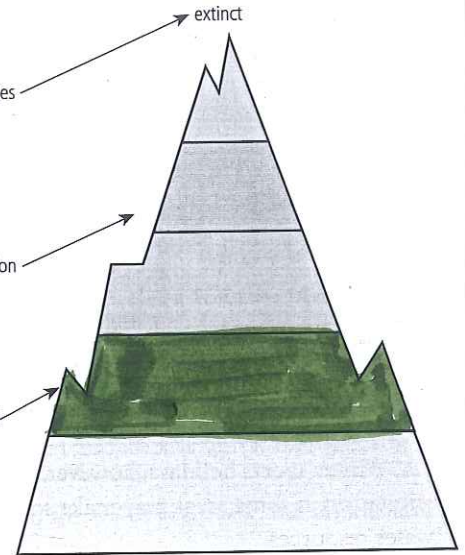
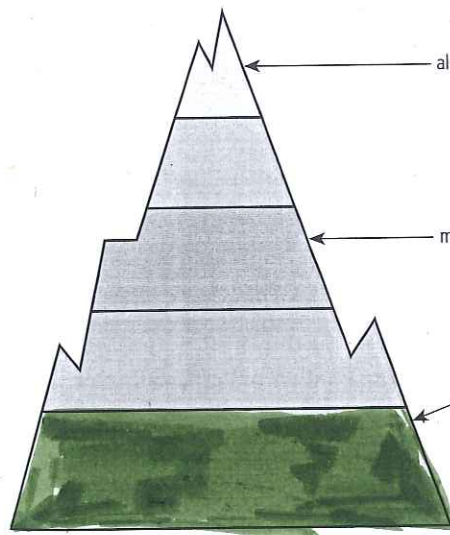
Today



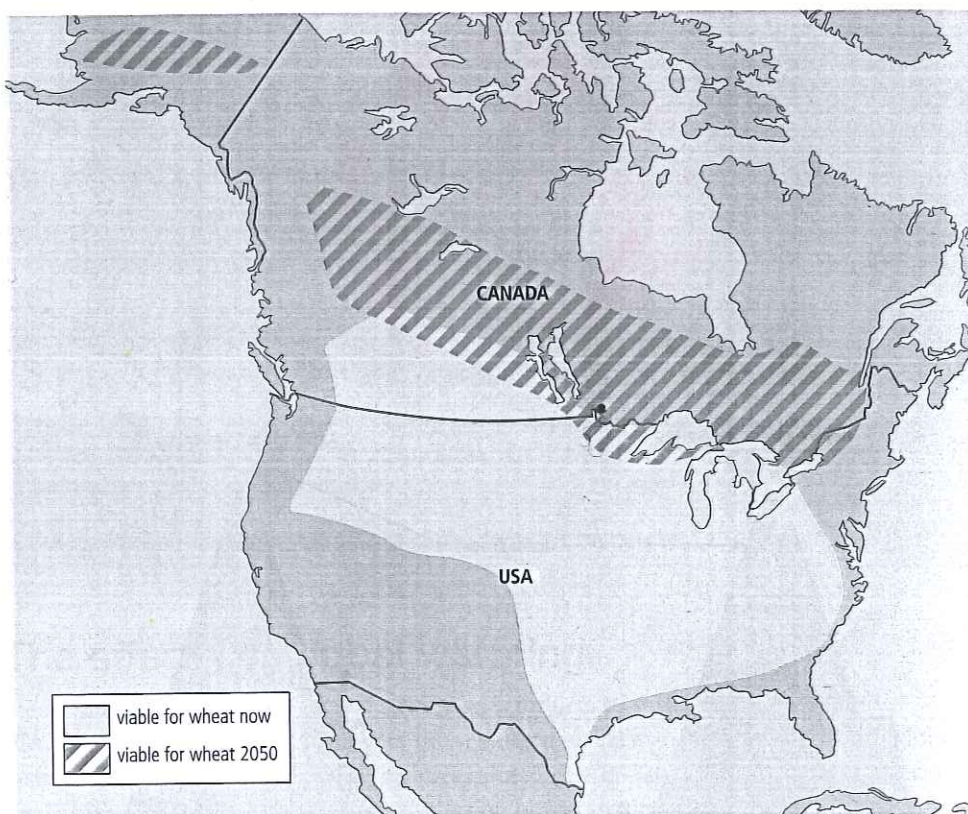
↑ in invasive & non-native spp.

Before global warming

After global warming

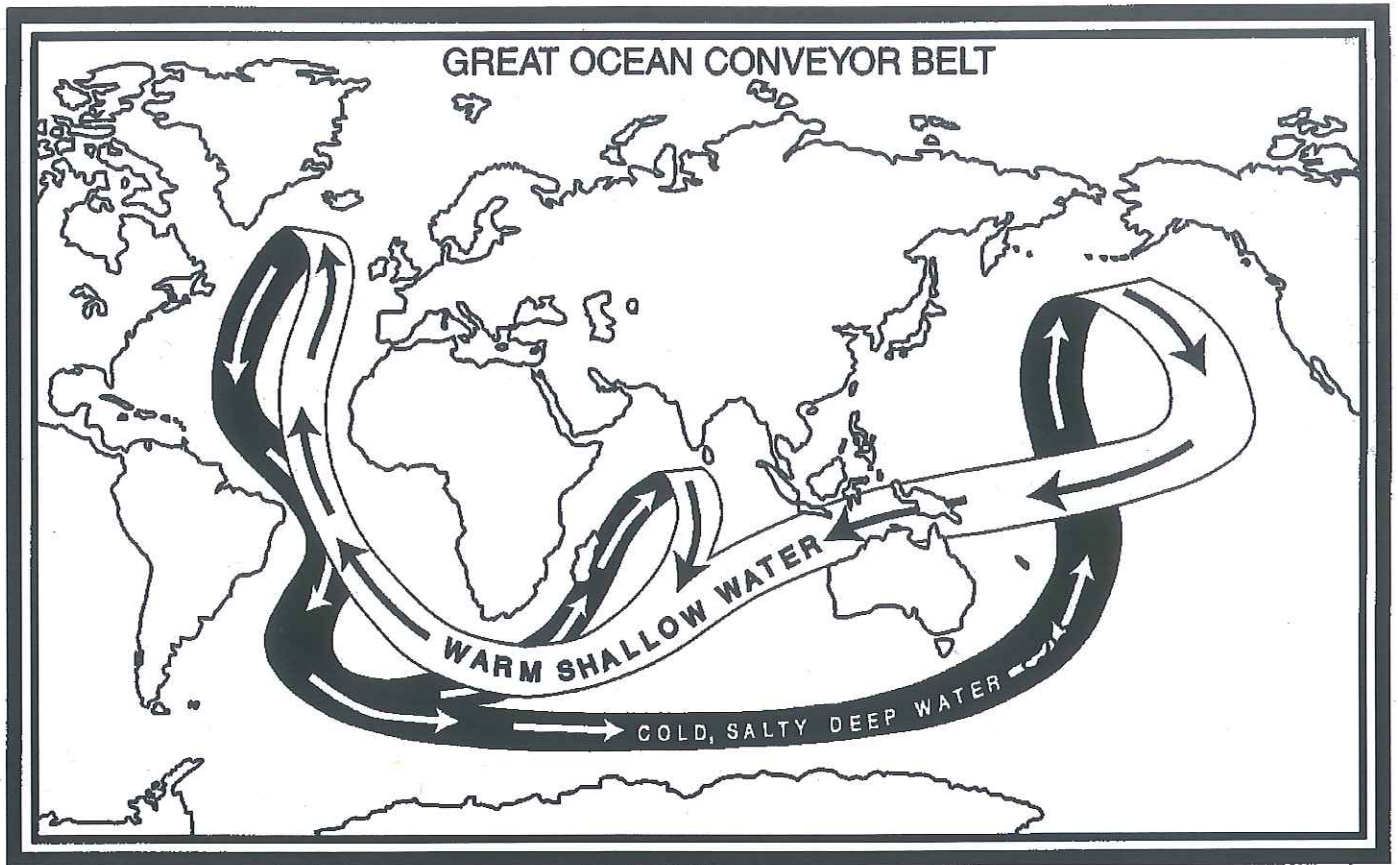


Zonation moves up the mountain →



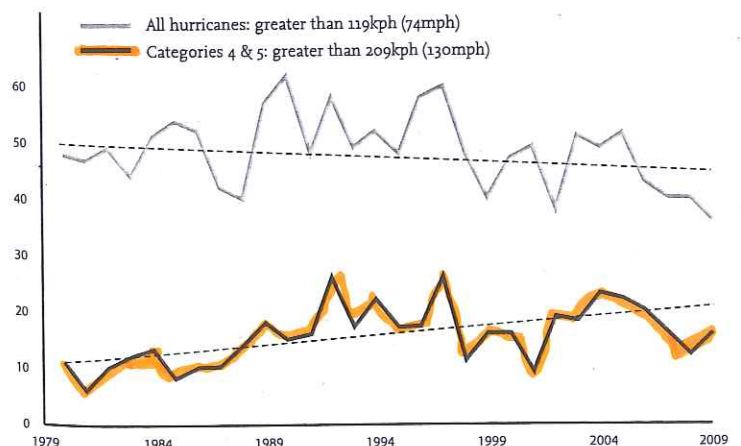
## Change in Location of Crop Growing Areas (Productivity)

Could mean loss of a country's productivity  
 ←  
 Suddenly, the US' midwest can't grow crops.  
 (also ↑ a country's Ecological Footprint)



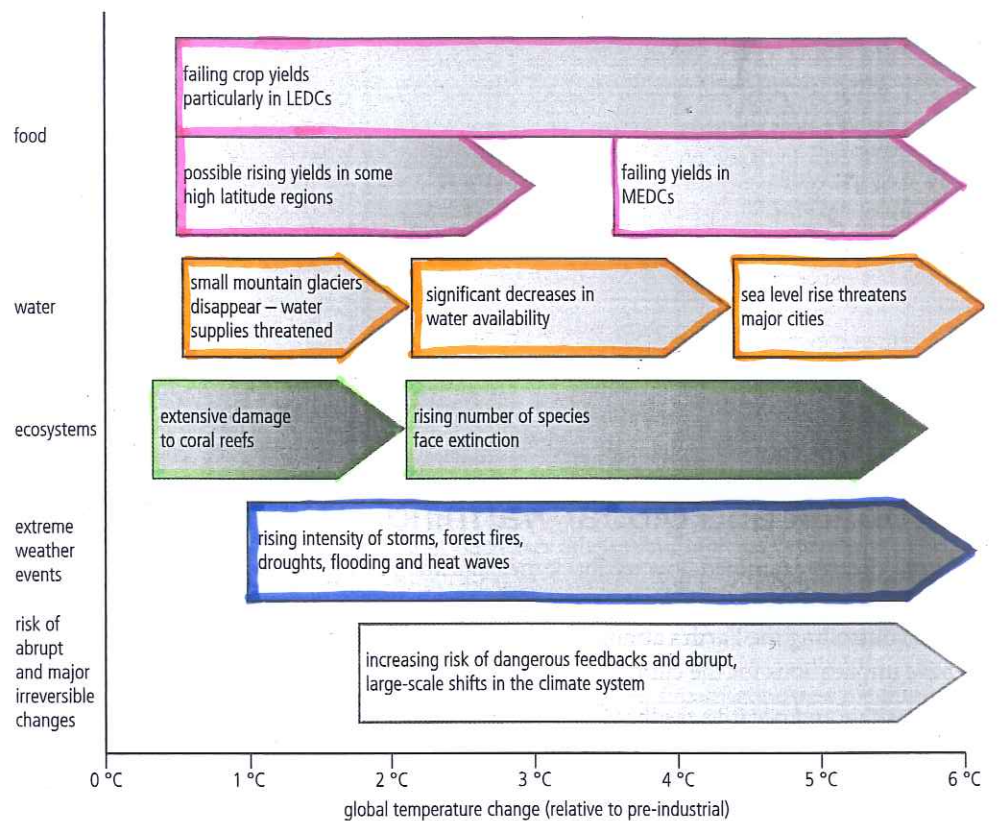
↑ Earth's weather depends on the Ocean Conveyor Belt. It all depends on Cold poles & Hot equator. As soon as this difference is gone → conveyor Belt STOPS.

↳ Warmer Oceans lead to More large, powerful storms





# BIG PICTURE



The effects of global warming are very varied. Much depends on the scale of the changes. Impacts could include the following.

- A rise in sea levels, causing flooding in low-lying areas such as the Netherlands, Egypt and Bangladesh – up to 200 million people could be displaced.
- 200 million people are at risk of being driven from their homes by flood or drought by 2050.
- 4 million square kilometres of land, home to one-twentieth of the world's population, is threatened by floods from melting glaciers.
- An increase in storm activity such as more frequent and intense hurricanes (because of more atmospheric energy).
- Changes in agricultural patterns (e.g. a decline in the USA's grain belt, but an increase in Canada's growing season).
- Reduced rainfall over the USA, southern Europe and the Commonwealth of Independent States (CIS).
- 4 billion people could suffer from water shortage if temperatures rise by 2°C.
- A 35 per cent drop in crop yields across Africa and the Middle East is expected if temperatures rise by 3°C.
- 200 million more people could be exposed to hunger if world temperatures rise by 2°C, 550 million if temperatures rise by 3°C.
- 60 million more Africans could be exposed to malaria if world temperatures rise by 2°C.
- Extinction of up to 40 per cent of species of wildlife if temperatures rise by 2°C.